What Is Claimed Is:

1. An apparatus for detecting a vehicle rollover, comprising a sensor suite (1) for sensing vehicle dynamics data and rollover data (v_x, ω_z, a_y, a_x, ω_x, β_{ESP}), the sensor suite (1) being connectable to a processor (2) which is configured in such a way that the processor (2) detects a vehicle rollover as a function of the vehicle dynamics data and rollover data (v_x, ω_z, a_y, a_x, ω_x, β_{ESP}),
wherein the processor (2) has means for dividing an operating state of the vehicle into chronologically successive phases (11 through 13); the processor (2) having, for each phase, means for determining a float angle and a transverse vehicle velocity from the vehicle dynamics data and rollover data (v_x, ω_z, a_y, a_x, ω_x, β_{ESP}); detection of the vehicle rollover being accomplished as a function of the float angle (β_0, β_1, β_2) and the transverse vehicle velocity (v_{y0}, v_{y1}, $_{vy2}$).

2. The apparatus as recited in Claim 1,
wherein the means for dividing the operating state are configured to distinguish three phases: a stable operating state (11), a skidding motion (12), and a skid (13), the stable operating state (11) being characterized by an almost constant float angle (β_0), the skidding motion by a large change in float angle, and the skid by a float angle (β_2) greater than a predefined threshold value (β_{min}).

3. The apparatus as recited in Claim 1 or 2,
wherein the sensor suite (1) senses a longitudinal vehicle velocity (v_x) and/or a yaw rate (ω_x) and/or a transverse vehicle acceleration (a_y) as the vehicle dynamics data.

4. The apparatus as recited in Claim 3,
wherein the sensor suite (1) additionally outputs the wheel rotation speeds and/or a longitudinal vehicle acceleration (a_x) and/or the steering angle and/or an estimate of the float angle (β_{ESP}).

5. The apparatus as recited in one of the preceding claims, wherein the apparatus is connectable to a restraint system (3) that the processor (2) activates as a function of detection of the rollover.

6. The apparatus as recited in one of the preceding claims, wherein a vehicle center-of-mass velocity is usable instead of the transverse vehicle velocity.